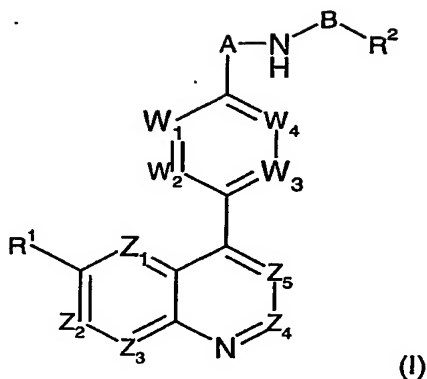


What is claimed is:

1. A compound of formula (I):

5



wherein:

one of Z₁, Z₂, Z₃, Z₄ and Z₅ is N, one is CR^{1a} and the remainder are CH, or
 10 one or two of Z₁, Z₂, Z₃, Z₄ and Z₅ are independently CR^{1a} and the remainder are CH;

R¹ and R^{1a} are independently hydrogen; hydroxy; (C₁₋₆)alkoxy unsubstituted or substituted by (C₁₋₆)alkoxy, amino, piperidyl, guanidino or amidino any of which is
 15 optionally N-substituted by one or two (C₁₋₆)alkyl, acyl or (C₁₋₆)alkylsulphonyl groups, CONH₂, hydroxy, (C₁₋₆)alkylthio, heterocyclithio, heterocycloxy, arylthio, aryloxy, acylthio, acyloxy or (C₁₋₆)alkylsulphonyloxy; (C₁₋₆)alkoxy-substituted(C₁₋₆)alkyl; halogen; (C₁₋₆)alkyl; (C₁₋₆)alkylthio; trifluoromethyl; trifluoromethoxy; nitro; cyano; azido; acyl; acyloxy; acylthio; (C₁₋₆)alkylsulphonyl; (C₁₋₆)alkylsulphoxide;
 20 arylsulphonyl; arylsulphoxide or an amino, piperidyl, guanidino or amidino group optionally N-substituted by one or two (C₁₋₆)alkyl, acyl or (C₁₋₆)alkylsulphonyl groups;

provided that when Z₁, Z₂, Z₃, Z₄ and Z₅ are CR^{1a} or CH, then R¹ is not hydrogen;

W_1 , W_2 , W_3 and W_4 are each independently selected from N or CR^3 ;

each R^3 is independently selected from:

- 5 hydrogen; hydroxy; halogen; trifluoromethyl; trifluoromethoxy; cyano; nitro; azido; acyl; acyloxy; acylthio; amino, mono- and di-(C_{1-6})alkylamino; and substituted and unsubstituted (C_{1-6})alkoxy, (C_{1-6})alkyl, (C_{3-7})cycloalkyl, aminocarbonyl, (C_{1-6})alkylthio, (C_{1-6})alkylsulphonyl, and (C_{1-6})alkylsulphoxide;

- 10 A is $(CRR)_n$;

B is $(CRR)_m$, $C=O$, or SO_2 ;

n is 1 or 2;

m is 1 or 2

provided that when n is 1, m is 2; when n is 2, m is 1; and when B is $C=O$ or SO_2

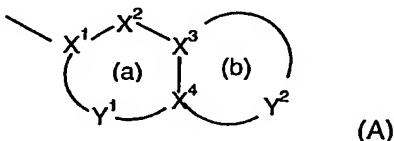
- 15 then n is 2;

each R is independently selected from

hydrogen; halogen; trifluoromethyl; trifluoromethoxy; cyano; nitro; azido; acyl; acyloxy; acylthio; amino, mono- and di-(C_{1-6})alkylamino; and substituted and

- 20 unsubstituted (C_{1-6})alkoxy, (C_{1-6})alkyl, (C_{3-7})cycloalkyl, aminocarbonyl, (C_{1-6})alkylthio, (C_{1-6})alkylsulphonyl, and (C_{1-6})alkylsulphoxide;

R^2 is a substituted or unsubstituted bicyclic carbocyclic or heterocyclic ring system of formula (A):



25

containing up to four heteroatoms in each ring in which

ring (a) is aromatic and ring (b) is aromatic or non-aromatic;

X^1 is C;

X^2 is N, NR^6 , O, $S(O)_x$, CO, CR^4 or CR^4R^5 ;

- 30 X^3 and X^4 are each independently N or C;

Y¹ is a 1 to 2 atom linker group each atom of which is independently selected from N and CR⁴;

Y² is a 2 to 6 atom linker group, each atom of Y² being independently selected from N, NR⁶, O, S(O)_x, CO, CR⁴ and CR⁴R⁵;

5

each R⁴ and R⁵ is independently selected from: hydrogen; (C₁₋₄)alkylthio; halo; carboxy(C₁₋₄)alkyl; halo(C₁₋₄)alkoxy; halo(C₁₋₄)alkyl; (C₁₋₄)alkyl; (C₂₋₄)alkenyl; (C₁₋₄)alkoxycarbonyl; formyl; (C₁₋₄)alkylcarbonyl; (C₂₋₄)alkenyloxycarbonyl; (C₂₋₄)alkenylcarbonyl; (C₁₋₄)alkylcarbonyloxy; (C₁₋₄)alkoxycarbonyl(C₁₋₄)alkyl; 10 hydroxy; hydroxy(C₁₋₄)alkyl; mercapto(C₁₋₄)alkyl; (C₁₋₄)alkoxy; nitro; cyano; carboxy; amino or aminocarbonyl is optionally substituted by (C₁₋₄)alkoxycarbonyl, (C₁₋₄)alkylcarbonyl, (C₂₋₄)alkenyloxycarbonyl, (C₂₋₄)alkenylcarbonyl, (C₁₋₄)alkyl or (C₂₋₄)alkenyl and optionally further substituted by (C₁₋₄)alkyl or (C₂₋₄)alkenyl; (C₂₋₆)alkenyl; 15 (C₁₋₄)alkylsulphonyl; (C₂₋₄)alkenylsulphonyl; or aminosulphonyl wherein the amino group is optionally mono- or di-substituted by (C₁₋₄)alkyl or (C₂₋₄)alkenyl; aryl; aryl(C₁₋₄)alkyl; aryl(C₁₋₄)alkoxy; or R⁴ and R⁵ may together represent oxo;

each R⁶ is independently hydrogen; trifluoromethyl; (C₁₋₄)alkyl unsubstituted or 20 substituted by hydroxy, (C₁₋₆)alkoxy, (C₁₋₆)alkylthio, halo or trifluoromethyl; (C₂₋₄)alkenyl; aryl; aryl(C₁₋₄)alkyl; arylcarbonyl; heteroarylcarbonyl; (C₁₋₄)alkoxycarbonyl; (C₁₋₄)alkylcarbonyl; formyl; (C₁₋₆)alkylsulphonyl; or aminocarbonyl wherein the amino group is optionally substituted by (C₁₋₄)alkoxycarbonyl, (C₁₋₄)alkylcarbonyl, (C₂₋₄)alkenyloxycarbonyl, 25 (C₂₋₄)alkenylcarbonyl, (C₁₋₄)alkyl or (C₂₋₄)alkenyl and optionally further substituted by (C₁₋₄)alkyl or (C₂₋₄)alkenyl; and each x is independently 0, 1, or 2; or a pharmaceutically acceptable salt thereof.

2. A compound according to claim 1 wherein Z_5 is CH or N, Z_3 is CH or CF and Z_1 , Z_2 and Z_4 are each CH, or Z_1 is N, Z_3 is CH or CF and Z_2 , Z_4 and Z_5 are each CH.
- 5 3. A compound according to claim 1 wherein R^1 is methoxy and R^{1a} is H or when Z_3 is CR^{1a} it may be C-F.
4. A compound according to claim 1 wherein:
- a) W_1 - W_4 are independently CR^3 ;
- 10 b) W_1 , W_3 and W_4 are N and W_2 is CR^3 ;
- c) W_2 is N and W_1 , W_3 and W_4 are independently CR^3 ;
- d) W_3 is N and W_1 , W_2 and W_4 are independently CR^3 ; or
- e) W_4 is N and W_1 - W_3 are independently CR^3 .
- 15 5. A compound according to claim 1 wherein R^3 is independently selected from hydrogen, substituted and unsubstituted (C_{1-6}) alkoxy, and NH_2 .
6. A compound according to claim 1 wherein R is independently selected from hydrogen, substituted and unsubstituted (C_{1-6}) alkyl, $CONH_2$, $COOH$, hydroxy,
- 20 halogen, and substituted and unsubstituted (C_{1-6}) alkoxy.
7. A compound according to claim 1 wherein in the heterocyclic ring (A), Y^2 has 3-5 atoms including NR^6 , O or S bonded to X^4 and $NHCO$ bonded via N to X^3 , or O or NH bonded to X^3 .
- 25 8. A compound according to claim 1 wherein R^2 is selected from
- 4*H*-benzo[1,4]thiazin-3-one-6-yl,
- 4*H*-pyrido[3,2-*b*][1,4]thiazin-3-one-6-yl,
- 4*H*-pyrido[3,2-*b*][1,4]oxazin-3-one-6-yl,
- 30 1,2,3,4-tetrahydro-[1,8]naphthyridine-7-yl,
- 1*H*-pyrido[3,2-*b*][1,4]thiazin-2-one-7-yl,

4*H*-benzo[1,4]oxazin-3-one-6-yl, and
6-fluoro-2,3-dihydrobenzo[1,4]dioxine-7-yl.

9. A compound according to claim 1 which is:

- 5 6-((2-[4-(6-Methoxy-[1,5]naphthyridin-4-yl)phenyl]ethylamino)methyl)-4*H*-benzo[1,4]thiazin-3-one;
6-((2-[4-(6-Methoxy-[1,5]naphthyridin-4-yl)phenyl]ethylamino)methyl)-4*H*-pyrido[3,2-*b*][1,4]thiazin-3-one;
- 10 6-((2-[4-(6-Methoxy-[1,5]naphthyridin-4-yl)phenyl]ethylamino)methyl)-4*H*-pyrido[3,2-*b*][1,4]oxazin-3-one;
3-Oxo-3,4-dihydro-2*H*-benzo[1,4]thiazine-6-sulfonic acid {2-[4-(6-methoxy-[1,5]naphthyridin-4-yl)phenyl]ethyl}amide;
{2-[4-(6-Methoxy-[1,5]naphthyridin-4-yl)phenyl]ethyl} (5,6,7,8-tetrahydro[1,8]naphthyridin-2-ylmethyl)amine;
- 15 6-([4-(6-Methoxy-[1,5]naphthyridin-4-yl)benzylamino)methyl]-4*H*-benzo[1,4]thiazin-3-one;
7-((2-[4-(6-Methoxy-[1,5]naphthyridin-4-yl)phenyl]ethylamino)methyl)-1*H*-pyrido[3,2-*b*][1,4]thiazin-2-one;
6-(2-[4-(6-Methoxy-[1,5]naphthyridin-4-yl)benzylamino]ethyl)-4*H*-
- 20 benzo[1,4]oxazin-3-one;
6-(2-[4-(6-Methoxy-[1,5]naphthyridin-4-yl)benzylamino]ethyl)-4*H*-benzo[1,4]thiazin-3-one;
(7-Fluoro-2,3-dihydrobenzo[1,4]dioxin-6-ylmethyl){2-[6-(6-methoxy[1,5]naphthyridin-4-yl)[1,2,4]triazin-3-yl]ethyl}amine;
- 25 6-((2-[4-(6-Methoxyquinolin-4-yl)phenyl]ethylamino)methyl)-4*H*-pyrido[3,2-*b*][1,4]oxazin-3-one;
6-((2-[4-(6,8-difluoroquinolin-4-yl)phenyl]ethylamino)methyl)-4*H*-pyrido[3,2-*b*][1,4]thiazin-3-one;
6-((2-[4-(8-Fluoro-6-methoxyquinolin-4-yl)phenyl]ethylamino)methyl)-4*H*-
- 30 pyrido[3,2-*b*][1,4]thiazin-3-one;
6-((2-[6-(6-methoxy-[1,5]naphthyridin-4-yl)pyridin-3-yl]ethylamino)methyl)-4*H*-pyrido[3,2-*b*][1,4]thiazin-3-one;
6-((2-[5-(6-methoxy-[1,5]naphthyridin-4-yl)pyridin-2-yl]ethylamino)methyl)-4*H*-pyrido[3,2-*b*][1,4]thiazin-3-one;
- 35 6-((2-[6-(6-methoxy-[1,5]naphthyridin-4-yl)pyridin-3-yl]ethylamino)methyl)-4*H*-pyrido[3,2-*b*][1,4]oxazin-3-one;

N-(2,3-dihydro[1,4]dioxino[2,3-*c*]pyridin-7-ylmethyl)-2-{6-[6-(methyloxy)-1,5-naphthyridin-4-yl]-3-pyridinyl}ethanamine;

N-(2,3-dihydro[1,4]dioxino[2,3-*c*]pyridin-7-ylmethyl)-2-{5-[6-(methyloxy)-1,5-naphthyridin-4-yl]-2-pyridinyl}ethanamine;

5 *N*-(2-{6-[6-(methyloxy)-1,5-naphthyridin-4-yl]-3-pyridinyl}ethyl)-3-oxo-3,4-dihydro-2*H*-pyrido[3,2-*b*][1,4]thiazine-6-carboxamide; and

N-(2-{5-[6-(methyloxy)-1,5-naphthyridin-4-yl]-2-pyridinyl}ethyl)-3-oxo-3,4-dihydro-2*H*-pyrido[3,2-*b*][1,4]thiazine-6-carboxamide;
or a pharmaceutically acceptable salt thereof.

10

10. A pharmaceutical composition comprising a compound according to claim 1 and a pharmaceutically acceptable carrier.

11. A method of treating bacterial infections in mammals which comprises the
15 administration to a mammal in need thereof an effective amount of a compound according to claim 1.